

## ABSTRACT

A method of calculating probability of collision by birds within a wind park includes modeling a wind turbine to create a wind-turbine model, modeling a challenged bird to create a challenged-bird model, modeling a wind park to create a wind-park model, the wind park  
5 comprising at least one of the wind turbine, and calculating a probability of wind-turbine collision by the challenged bird. The step of calculating includes using the wind-turbine model, the challenged-bird model, and the wind-park model. A method for calculating a probability of collision by animals other than birds with structures including, but not limited to, wind turbines, is also disclosed.

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